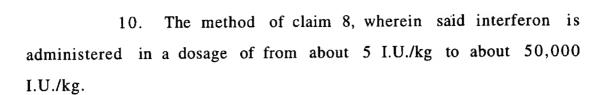
WHAT IS CLAIMED IS:

- A method of treating an auto-immune disease in an animal comprising the step of orally administering a type one interferon to said animal such that the type one interferon is ingested after oral administration.
- 2. The method of claim 1, wherein said interferon is (IFN-a) selected from alpha-interferon and beta-interferon.
- 3. The method of claim 2, wherein said interferon is selected from the group consisting of human recombinant interferon, rat interferon and murine interferon.
- 4. The method of claim 2, wherein said interferon is administered in a dosage of from about 50 I.U./kg to about 25,000 I.U./kg.
- 5. The method of claim 1, wherein said interferon is administered every other day.

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- 6. The method of claim 1, wherein said animal is a human.
- 7 The method of claim 1, wherein said auto-immune disease is selected from the group consisting of multiple sclerosis, rheumatoid arthritis, diabetes mellitus, psoriasis, organ-specific auto-immune diseases, chronic inflammatory demyelinating polyradiculoneuropathy and Guillain-Barré syndrome.
- 8. A method of decreasing the incidence of insulin15 dependent diabetes mellitus in at-risk populations, comprising the step of orally administering AINF-α to individuals of said at-risk population.
- 9. The method of claim 8, wherein said interferon is selected from the group consisting of human recombinant interferon, rat interferon and murine interferon.



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11. The method of claim 8, wherein said interferon is administered every other day.

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12. A method of reducing blood glucose levels in an animal comprising the step of orally administering $\frac{1}{1}$ is ingested after oral administration.

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13. The method of claim 12, wherein said interferon is selected from the group consisting of human recombinant interferon, rat interferon and murine interferon.

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14. The method of claim 12, wherein said interferon is administered in a dosage of from about 50 I.U./kg to about 25,000 I.U./kg.

The method of claim 12, wherein said animal is a

human.

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16. A method of decreasing the onset of insulindependent diabetes mellitus in at-risk populations, comprising the step of orally administering $\frac{1}{1000}$ to individuals of said at-risk population.

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17. The method of claim 16, wherein said $\frac{1NF}{1}$ - α is selected from the group consisting of human recombinant interferon, rat interferon and murine interferon.

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The method of claim 16, wherein said interferon is administered in a dosage of from about 50 I.U./kg to about 25,000 I.U./kg.

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